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AMENDMENT & RESPONSE UNDER 37 C.F.R. § 1.116 - EXPEDITED PROCEDURE

Serial Number: 09/650,551

Filing Date: August 30, 2000

Title: **REDUNDANT IMAGING METHODS AND SYSTEMS**

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REMARKS

This amendment cancels claim 27, and amends claims 12, 16, 30, and 38; as a result, claims 7-21 and 28-38 are now pending in this application. Of these, claims 13-21 and 32-37 stand allowed, and claims 7-12, 28-31, and 38 stand rejected.

Note that allowed claim 16 was amended to avoid duplicating the scope of allowed claim 13. Specifically, claim 16 now recites "photodetection means" which is intended to be construed under 35 USC §112, p6. No other claims in the application are intended to be construed under paragraph six.

For the sake of brevity, applicant respectfully reserves all applicable rights not asserted in or with this response, including, for example, the right to rebut tacit and explicit characterizations of one or more cited references, the right to rebut any cited motivation for combination, and the right to swear behind one or more cited references. Additionally, applicant regards all the cited art, as merely art of record, and makes no admissions regarding the prior-art status of any of the cited references.

Response to Drawing Objection

The Examiner objected to the drawings under 37 CFR 1.83(a), stating that they did not show all the features of claim 38. In response, applicant has amended claim 38 to clarify the use of first and second variable gain amplifiers being responsive to respective first and second aggregate image signals. (The amendment is not intended to evidence the surrender or disclaimer of any literal or equivalent subject matter that applicant is otherwise entitled to.)

Accordingly, applicant requests respectfully that the Examiner reconsider and withdraw the drawing objection.

Response to §112 Rejections based on Indefiniteness

The Examiner rejected claims 7-12, 28-31, and 38 under 35 USC § 112, second paragraph, as indefinite.

Regarding claims 7 and 10, the Examiner stated "it is unclear which two pixel image signals (from which group pixel) are summed." In response, applicant submits respectfully that

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the claims are clear and definite in not restricting which pixel image signals are summed. Indeed, the Examiner has pointed out that the clear lack of restrictions as to which pixel image signals are summed. Hence, the claims suffer no vagueness or ambiguity in signaling that the scope of these claims is not limited in terms of which or where the pixel images signals are summed. Further, applicant notes that based on the teachings of the present invention one of skill may choose to multiplex a summer with multiple group pixels.

Accordingly, applicant requests respectfully that the Examiner reconsider and withdraw the rejection of claims 7 and 10 for indefiniteness.

Regarding claim 12, the Examiner noted that "the variable-gain amplifier" lacks proper antecedence. In response, applicant has amended claim 12 to recite "a digital variable-gain amplifier." (This amendment is not intended to evidence the surrender or disclaimer of any literal or equivalent subject matter that applicant is otherwise entitled to.)

Accordingly, applicant requests respectfully that the Examiner reconsider and withdraw the rejection of claims 7 and 10 for indefiniteness.

Regarding claim 30, the Examiner asserted that "the same color light" lacked proper antecedence. In response, applicant has amended the phrase to read "the same color of light." (This amendment is not intended to evidence the surrender or disclaimer of any literal or equivalent subject matter that applicant is otherwise entitled to.) Further applicant notes that the clarity of this claim would suffer with an expression such as "substantially a same color of light." Moreover, there is no apparent ambiguity in using the phrase "the same color of light" since the claim recites no other colors of light.

Accordingly, applicant requests respectfully that the Examiner reconsider and withdraw the rejection of claim 30 for indefiniteness.

Regarding claim 38, the Examiner cited an apparent ambiguity in the use of "the summer" at lines 6 and lines 11-12. In response, applicant has amended the claim at lines 11-12 to recite "the other summer" which has "another summer" as its antecedent. (This amendment is not intended to evidence the surrender or disclaimer of any literal or equivalent subject matter

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that applicant is otherwise entitled to.) Applicant believes “the summer” has clear antecedence in claim 10's recitation of “a summer.”

Accordingly, applicant requests respectfully that the Examiner reconsider and withdraw the rejection of claim 38 for indefiniteness.

Response to §112 Rejections based on Non-Enablement

The Examiner also rejected claims 7-12 and 28-31 under 35 USC §112, first paragraph, as not being enabled, specifically asserting that “Applicant has failed to describe an embodiment in which pixel image signals from two group pixels are summed.” In response, applicant submits respectfully that the rejected claims do not require summation of pixel images signals from two groups. Absent a showing that the claims require something that is not within the teachings of the specification, applicant requests respectfully that the Examiner reconsider and withdraw the rejection of claims 7-12 and 28-31 under §112, first paragraph.

The Examiner also rejected claim 38 under 35 USC § 112, second paragraph, as not being enabled, particularly stating “it appears that Applicant has failed to describe an embodiment in which two variable gain amplifiers are responsive to one aggregate image signal and two gain controllers for outputting the same gain.” (Emphasis in original.) In response, applicant has amended claim 38 to clarify that the first and second variable gain amplifiers are responsive to respective first and second aggregate image signals and that the gain controllers control separately adjustable gains. (The amendment is not intended to evidence the surrender or disclaimer of any literal or equivalent subject matter that applicant is otherwise entitled to.)

Accordingly, applicant respectfully requests that the Examiner withdraw the rejection of claim 38 under §112, second paragraph.

Response to §103 Rejections based on Fazekas

The Examiner rejected claims 10-12, 30, and 31 under 35 USC § 103(a) as unpatentable over Fazekas (U.S. Patent No. 5,635,700), specifically asserting that Fazekas lacks a second group pixel and that it would have been obvious to add one since Fazekas “recognizes that the

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performance of the apparatus would be increased with more photodetectors."

In response, applicant submits that Examiner has failed to set forth a prima facie case of obviousness. Specifically, the Examiner has not set forth any evidence that relates to a second group pixel. Fazekas suggests a benefit of adding more photodetectors to its system. However, nothing has been presented to show that one of skill would equate the addition of more photodetectors with the addition of a second group pixel. Assuming for sake of argument that Fazekas' multi-channel detector 80 constitutes "a first group pixel," adding photodetectors would merely increase the number of photodetectors within the first group pixel, not establish a second group pixel. Thus, even if one were motivated to add photodetectors to Fazekas, the resulting system would not meet the requirements of the rejected claims.

Accordingly, applicant requests respectfully that the Examiner reconsider and withdraw the §103 rejections based on Fazekas.

Response to §103 Rejections based on Matsumoto

The Examiner rejected claims 7-9, 28, and 29 under 35 USC § 103(a) as unpatentable over Matsumoto (U.S. Patent No. 3,906,389), specifically asserting that Matsumoto fails only to disclose the second group pixel and that it would have been obvious to "provide an additional group pixel or image sensor at the taking objective of Matsumoto et al. to capture a digital image for improved photographic quality."

In response, applicant submits respectfully that the Action fails to set forth a prima facie case of obviousness. Even if one were motivated to replace Matsumoto's taking objective with a digital image sensor, nothing has been presented to show that one of skill would equate the digital image sensor with the addition of a "second group pixel." Indeed, such a sensor would presumably be a plurality of singular photodetectors with no organization as a group pixel.

Accordingly, applicant requests respectfully that the Examiner reconsider and withdraw the §103 rejections based on Matsumoto.

In addition, applicant notes that the Examiner has cited no reference supporting his assertion that one would have been motivated "to provide a second group pixel or image sensor

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at the taking objective of Matsumoto et al. to capture a digital image for improved photographic quality.” The omission of a reference indicates that the Examiner has tacitly taken Official Notice of the contents of the art. As such applicant requests pursuant to 37 C.F.R. § 1.104(d)(2) and MPEP 2144.03 that the Examiner provide a personal affidavit or published reference to support his assertion.

Reply to Examiner’s Response to Arguments

At page 7 of the Action, the Examiner states that “simply providing a second group pixel or additional image sensor that outputs signals that are not summed or processed require[s] only routine skill in the art. In response, applicant submits respectfully that the proper standard of obviousness is not whether one of skill ...could.... have provided a second group pixel, but whether there is an objecting teaching of the desirability of providing it. See MPEP 2143.01, which, among other things, states **FACT THAT THE CLAIMED INVENTION IS WITHIN THE CAPABILITIES OF ONE OF ORDINARY SKILL IN THE ART IS NOT SUFFICIENT BY ITSELF TO ESTABLISH PRIMA FACIE OBVIOUSNESS.** (Emphasis in original.) The present record appears devoid of teaching or suggestion of any desirability of providing anything that can be fairly understood as a “second group pixel.”

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Title: REDUNDANT IMAGING METHODS AND SYSTEMS**CONCLUSION**

In view of the amended claims and these remarks, applicant respectfully requests entry of the amendment and withdrawal of all objections and rejections. Additionally, applicant invites the Examiner to telephone its patent counsel Eduardo Drake at (612) 349-9593 to further facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

DAVID J. MCELROY ET AL.

By their Representatives,

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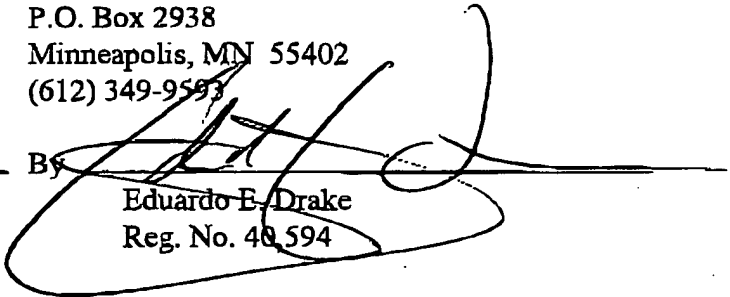
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